

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

OPTIS WIRELESS TECHNOLOGY, LLC,  
OPTIS CELLULAR TECHNOLOGY, LLC,  
PANOPTIS PATENT MANAGEMENT,  
LLC, UNWIRED PLANET, LLC,  
UNWIRED PLANET INTERNATIONAL  
LIMITED,

*Plaintiffs,*

V.

APPLE INC.,

*Defendant.*

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CIVIL ACTION NO. 2:19-CV-00066-JRG

**MEMORANDUM OPINION AND ORDER**

Before the Court are the following motions filed by Defendant Apple Inc. (“Defendant” or “Apple”):

- 1. Apple Inc.'s Rule 50(B) Motion #1 for Judgment as a Matter of Law of No Liability Under the '557, '332, '774, and '833 Patents (the "First JMOL Motion")** (Dkt. No. 554);
- 2. Defendant's Rule 50(b) Motion #2 for Judgment as a Matter of Law of No Liability on the '284 Patent and of No Indirect or Willful Infringement of Any Patent (the "Second JMOL Motion")** (Dkt. No. 555);<sup>1</sup>

<sup>1</sup> The Second JMOL Motion exceeds the page limits set forth in Local Rules CV-50 and 7(a)(3), and Apple filed an Unopposed Motion to File Corrected 50(b) Motion #2 for Judgment as a Matter of Law of No Liability on the '284 Patent and of No Indirect or Willful Infringement of Any Patent (Dkt. No. 563). Since the relief requested in the Second JMOL Motion is denied herein, Dkt. No. 563 is hereby **DENIED AS MOOT**.

3. **Defendant’s Rule 50(b) Motion for Judgment as a Matter of Law Regarding Damages** (the “Damages JMOL Motion”) (Dkt. No. 557); and
4. **Apple Inc.’s Supplemental Motion For A New Trial** (the “Motion for New Trial”) (Dkt. No. 578).

Having considered these Motions, and for the reasons stated herein, the Court finds that the Motions should be **DENIED** on all grounds except as to contributory infringement. As to contributory infringement, it is undisputed that no evidence was presented at trial, so JMOL is **GRANTED**.

## I. BACKGROUND

Plaintiffs Optis Wireless Technology, LLC; Optis Cellular Technology, LLC; Unwired Planet, LLC; Unwired Planet International Limited; and PanOptis Patent Management, LLC (collectively, “Plaintiffs” or “Optis”) filed suit against Apple alleging that Apple’s products<sup>2</sup> (the “Accused Products”) infringe U.S. Patent Nos. 8,019,332 (the “’332 Patent”), 8,385,284 (the “’284 Patent”), 8,411,557 (the “’557 Patent”), 9,001,774 (the “’774 Patent”), 8,102,833 (the “’833 Patent”) (collectively, the “Asserted Patents”). (Dkt. No. 26).<sup>3</sup> The Court conducted a jury trial with respect to the Asserted Patents from August 3, 2020 through August 11, 2020. (Dkt. Nos.

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<sup>2</sup> For the ’774 Patent, the Accused Products were: the iPad (3rd generation), iPad mini, iPad (4th generation), iPad Air, iPad mini 2 with Retina display, iPad Air 2, iPad mini 3, iPad Pro (12.9-inch), iPad mini 4, iPad Pro (9.7-inch), iPad (5th generation), iPad Pro (12.9-inch) (2nd generation), iPad Pro (10.5-inch), iPad (6th generation), iPad Pro 11-inch, iPad Pro 12.9-inch (3rd generation), iPad Air (3rd generation), iPad mini (5th generation), iPhone 5, iPhone 5c, iPhone 5s, iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus, iPhone SE, iPhone 7, iPhone 7 Plus, iPhone 8, iPhone 8 Plus, iPhone X, iPhone XS, iPhone XS Max, iPhone XR, iPhone 11 Pro, iPhone 11 Pro Max, iPhone 11, Apple Watch Series 4, Apple Watch Series 5. (Dkt. No. 360 at 20). For the ’332, ’284, ’557, and ’833 Patents, Plaintiffs also accused the Apple Watch Series 3. (Dkt. No. 360 at 20–21; Dkt. No. 501 at 160:13–21). The additional allegation of infringement against the Apple Watch Series 3 against four of the Asserted Patents does not alter the Court’s analysis herein, and the Court globally refers to the accused products with respect to the ’774 Patent as the Accused Products.

<sup>3</sup> Plaintiffs also alleged infringement of U.S. Patent Nos. 8,005,154 and 8,989,290, but those allegations were withdrawn before trial. (*Compare* Dkt. No. 1, *with* Dkt. No. 490 at 182:1–21).

460, 461, 466, 474, 482, 485, 486). At the close of evidence, the parties moved for judgment as a matter of law pursuant to Federal Rule of Civil Procedure 50(a). (*See* Dkt. No. 499). Among the Rule 50(a) motions heard by the Court were Defendant’s motions for judgment as a matter of law of non-infringement, no willful infringement, and invalidity of the Asserted Patents, and no damages. (*Id.* at 929:7–931:16).

On August 11, 2021, the jury returned a verdict finding that Defendant infringed one or more claims asserted by Plaintiffs, such claims being Claims 1 and 10 of the ’557 Patent, Claims 6 and 7 of the ’332 Patent, Claim 6 of the ’774 Patent, Claim 8 of the ’833 Patent, and Claims 1, 14, and 27 of the ’284 Patent (collectively, the “Asserted Claims”); that none of the Asserted Claims are invalid; that Defendant’s infringement of the Asserted Patents was willful; and that Plaintiffs were entitled to \$506,200,000.00 for infringement of the Asserted Patents, in the form of a royalty for past sales only. (Dkt. No. 483). The Court entered Final Judgment on February 25, 2021, memorializing the jury’s findings but electing not to enhance damages for willful infringement under 35 U.S.C. § 284. (Dkt. No. 544).

On April 14, 2021, the Court granted a new trial as to damages in the above-captioned case, vacating as to damages the Court’s previous Judgment. (Dkt. Nos. 544, 585). The Court found that a new trial on damages was warranted as to the amount of a fair, reasonable, and nondiscriminatory (“FRAND”) royalty for the use of the Asserted Patents. (Dkt. No. 585 at 9). The Court declined, however, to grant a new trial as to liability. (*Id.* at 10).

## **II. APPLE’S JMOL MOTIONS**

Pursuant to Federal Rule of Civil Procedure 50(b), Defendant filed JMOL Motions seeking judgment as a matter of law of: (1) non-infringement, no willful infringement, and invalidity of the Asserted Claims of the Asserted Patents; and (2) no damages. (*See* Dkt. Nos. 554, 555, 557).

The Court finds that substantial evidence exists supporting the jury’s verdict on each of the grounds raised by Defendant.

### **A. Legal Standard**

“Judgment as a matter of law is proper when ‘a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.’” *Abraham v. Alpha Chi Omega*, 708 F.3d 614, 620 (5th Cir. 2013) (quoting Fed. R. Civ. P. 50(a)). The non-moving party must identify “substantial evidence” to support its positions. *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 569 (E.D. Tex. 2007). “Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004).

“The Fifth Circuit views all evidence in a light most favorable to the verdict and will reverse a jury’s verdict only if the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018) (citing *Bagby Elevator Co. v. Schindler Elevator Corp.*, 609 F.3d 768, 773 (5th Cir. 2010)). A court must “resolve all conflicting evidence in favor of [the verdict] and refrain from weighing the evidence or making credibility determinations.” *Gomez v. St. Jude Med. Daig Div. Inc.*, 442 F.3d 919, 937–38 (5th Cir. 2006).

### **B. Discussion**

#### **a. THE FIRST JMOL MOTION**

Apple argues that it is entitled to judgment as a matter of law on the basis that Plaintiffs did not present sufficient evidence to support a finding of liability for infringement of the ’557, ’332, ’774, or ’833 Patents. (Dkt. No. 554 at 5). For each patent, Apple challenges the sufficiency of the evidence with respect to direct infringement and validity. (*See id.* at 5–32).

### **i. The '557 Patent**

Defendant provides five arguments to support its position of no direct infringement of the '557 Patent: first, the Accused Products do not infringe because they do not have a “plurality of sequences ... that are generated from a plurality of base sequences”; second, the Accused Products do not “select a sequence from a plurality of sequences”; third, that the Accused Products do not “partition[] the predetermined number of sequences”; fourth, that method claim 10 was not used in the United States; and fifth, that Plaintiffs failed to prove that the Accused Products infringed claims 1 and 10 under the doctrine of equivalents (“DOE”) (*Id.* at 5–14).

#### **1. Direct Infringement**

##### *i. “sequences ... that are generated from a plurality of base sequences”*

Claims 1 and 10 of the '557 Patent recite “sequences ... that are generated from a plurality of base sequences.” (Dkt. No. 554 at 5). Defendant contends that Plaintiff did not show that “base sequences” are used to generate the required sequences. (*Id.*). Instead, Defendant argues that no reasonable jury could have concluded that the Accused Products met this limitation because the evidence at trial showed that the Accused Products “generate a *single* sequence from parameters, not from the required *plurality* of base sequences.” (*Id.* at 7) (emphasis in original). Defendant argues that Plaintiffs’ expert Dr. Madisetti failed to show that either the Accused Products practice this claim limitation or that the LTE standard requires the same. (*Id.* at 5–7).

In response, Plaintiffs argue that Dr. Madisetti testified that Defendant practices the portion of the LTE standard that satisfies this claim limitation. (Dkt. No. 588 at 10) (citing Dkt. No. 502 at 19:1–12; PX940, PX1005). In addition, Plaintiffs assert that Dr. Madisetti analyzed the relevant Qualcomm and Intel source code to further support his conclusion that the Accused Products

practice this limitation. (Dkt. No. 588 at 11–12) (citing Dkt. No. 502 at 25:4–14; PX0119; PX0120).

The Court finds substantial evidence to support a finding of infringement for this claim limitation. With respect to the LTE standard, Dr. Madisetti explained that “Section 5.7.2 and Tables 5.7.3.4 and 5.7.2.2 explicitly disclose the portions of the claim that are described here, the plurality of base sequences generated from the Zadoff-Chu. There’s a plurality in plural. And there’s several of them.” (Dkt. 502 at 17:24–18:6; *see also* PX0935). Dr. Madisetti also testified that sequences, *i.e.*, “random access preambles,” are “generated from Zadoff-Chu sequences,” which are in turn generated from “several Zadoff-Chu sequences.” (Dkt. No. 502 at 17:24–18:6; PX0935). Dr. Madisetti identified the “several Zadoff-Chu sequences” as “the plurality of base sequences.” This is substantial evidence that the Accused Products include “sequences ... that are generated from a plurality of base sequences,” as recited in claims 1 and 10. The jury was entitled to accept Dr. Madisetti’s testimony and reject the testimony of Defendant’s experts that the Accused Products do not operate according to the relevant portions of the LTE standard.

*ii. “select a sequence from a plurality of sequences”*

Defendant argues that no reasonable jury could have found that Accused Products “select a sequence from a plurality of sequences,” as required by claims 1 and 10 of the ’557 Patent. (Dkt. No. 554 at 8). Rather, Defendant contends that Dr. Madisetti identified only a “sequence index” and a “single generated sequence of values.” (*Id.*). According to Defendant, a “sequence index” is not a “sequence” and a “single generated sequence of values” is not a “plurality of sequences.” (*Id.*). Both sides’ experts agreed, Defendant argues, that a sequence must comprise a *set* of values, rather than a single value—*i.e.*, a “sequence index.” (*Id.* at 8–9).

Plaintiffs argue that Defendant’s argument is based on Defendant’s expert Mr. Lanning’s interpretation of the term “sequence” as “a set of values in a specific order.” (Dkt. No. 588 at 13). Plaintiffs argue that the term “sequence” is not so limited, and assert that Defendant failed to seek construction of this term. (*Id.*). Plaintiffs contend that Dr. Madisetti described where the ’557 Patent describes selecting a sequence by an index and argues that this analysis was properly performed within his understanding of the term “sequence.” (*Id.* at 14) (citing Dkt. 502 at 19:13–18; Dkt. No. 507 at 76:2–7).

Dr. Madisetti described the relationship in the ’557 Patent between sequences and sequence indexes and showed how selecting a random access preamble by a corresponding index falls within the claim scope. (Dkt. 507 at 76:2–7, 76:10–19). This testimony did not run afoul of any of the Court’s claim constructions, as the term “sequence” was not construed. Dr. Madisetti also explained that one random access preamble is selected out of the plurality of 64 random access preambles. (Dkt. 502 at 19:1–10, 24:12–23). Thus, the Court finds that Plaintiffs presented substantial evidence as to this limitation.

*iii. “partition[] the predetermined number of sequences”*

Defendant argues that Plaintiffs failed to show that Accused Products partition sequences. (Dkt. No. 554 at 10–11). At best, Defendant contends, Plaintiffs’ expert Dr. Madisetti provided testimony that groups are partitioned, but his testimony did not show that specific sequences are partitioned or demonstrate the relationship between groups and sequences. (*Id.*). Defendant argues that, by contrast, its own expert Mr. Lanning described how the Accused Products use “on the fly” sequence transmission to directly determine which sequence needs to be transmitted and then transmitting it. (*Id.* at 11).

Plaintiffs respond that Dr. Madisetti testified that in the LTE standard, 64 preambles—*i.e.*, the “predetermined number of sequences”—are grouped into Group A or Group B. (Dkt. No. 588 at 14–15) (citing Dkt. No. 502 at 14:13–25). These 64 sequences, Plaintiffs argue, vary between Group A and Group B based on control information, and therefore specific sequences (not merely groups) are partitioned into Group A or Group B. (Dkt. No. 588 at 15) (citing Dkt. No. 502 at 24:4–23).

The Court finds that Plaintiffs presented substantial evidence that the Accused Products “partition[] the predetermined number of sequences.” Dr. Madisetti testified that specific predetermined sequences, not just groups, are partitioned. (Dkt. No. 502 at 14:13–25) (“So the partitioning is confirmed, the size variation is confirmed, and further, as you can see in this control information, the size of the -- the total number of preambles varies between 4 and 64, while the size of Group A varies between 4 and 60. So the size can be varied, and Group B can also be varied as a result.”).

*iv. Use of Method Claim 10 in the United States*

Defendant argues that Plaintiffs offered no evidence of actual infringing use of claim 10 in the United States. (Dkt. No. 554 at 11–12). Defendant argues that Dr. Madisetti did not conduct a separate analysis for claim 10, relying instead on his analysis for claim 1. (*Id.* at 11). Defendant further claims that “although Dr. Madisetti testified about Apple’s alleged LTE testing, he failed to establish that Apple tested all LTE functionalities or those that Plaintiffs accuse of infringing [c]laim 10.” (*Id.* at 12). This alleged failure, Defendant argues, violates case law holding that all method steps must be shown were performed in the United States. (*Id.* at 12) (citing *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1206 (Fed. Cir. 2010)).



In response, Plaintiffs argue that Dr. Madisetti testified that LTE TS 36.321 and 36.331 practice claims 1 and 10 of the '557 Patent and described that those portions of the standard are mandatory. (Dkt. No. 588 at 15) (citing Dkt. No. 502 at 32:4–12). Plaintiffs also contend that Dr. Madisetti provided evidence that Defendant tested the relevant portions of the LTE standard in the United States. (Dkt. No. 588 at 15–16) (Dkt. No. 502 at 28:17–25, 29:3–25, 32:4–17).

Plaintiffs provided sufficient evidence from which the jury could reasonably conclude the Accused Products satisfied this limitation of claim 10. Dr. Madisetti testified as to testing of the LTE standard in the United States and provided a sufficient basis to link the LTE standard to the recited functionality in claims 1 and 10. (*See* Dkt. No. 502 at 28:17–25, 29:3–25, 32:4–17; PX2855).

*v. Doctrine of Equivalents*

Defendant argues that Plaintiffs did not “provide particularized testimony and linking argument as to the insubstantiality of the differences between the claimed invention and the accused device or process, or with respect to the function, way, result test ... on a limitation-by-limitation basis.” (Dkt. No. 554 at 12) (quoting *Texas Instruments, Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1567 (Fed. Cir. 1996)). Specifically, Defendant contends that Plaintiffs’ expert, Dr. Madisetti, discussed equivalence only with respect to “selecting a sequence” of claims 1 and 10, rather than the full limitation, which requires sequence selection “from a plurality of sequences ... that are generated from a plurality of base sequences.” (Dkt. No. 554 at 12) (citing Dkt. No. 493 at 21:17–22:16; Dkt. No. 498 at 77:19–78:1). Defendant argues that its own experts, Mr. Lanning and Dr. Josiam, testified that the “[accused] products operate in a substantially different way by generating a sequence from parameters and selecting a sequence index to generate only a single sequence on the fly, not selecting a sequence from a plurality of generated

sequences.” (Dkt. No. 554 at 13) (citing Dkt. No. 497 at 15:7–17:13, 863:16–869:16; Dkt. No. 496 at 24:24–28:1).

Plaintiffs respond by arguing that Dr. Madisetti explained that the function of selecting a sequence is satisfied by “the process of creating the table of sequences in the code, the process of selecting a sequence, and the process of generating the selected sequence.” (Dkt. No. 588 at 17) (quoting Dkt. No. 502 at 22:1–6). Plaintiffs argue that for the DOE analysis, it was appropriate for Dr. Madisetti to build upon without repeating his prior testimony relating to literal infringement. (Dkt. No. 588 at 16–18).

The Court finds that Dr. Madisetti properly incorporated by reference his earlier testimony into the DOE analysis. (Dkt. 502 at 21:17–22:6). Dr. Madisetti further expanded upon that analysis to show insubstantiality between the claims and the Accused Products. (Dkt. No. 502 at 22:1–6, 21:8–16, 22:1–6). The Court finds that Plaintiffs presented substantial evidence to support a finding of infringement under the DOE as to this limitation.

## 2. Validity

Defendant argues that its expert, Mr. Lanning, presented a strong case that the Sutivong and Tan references rendered obvious claims 1 and 10 of the ’557 Patent, and this testimony went un rebutted by Plaintiffs’ expert Dr. Madisetti. (Dkt. No. 554 at 14–15). Defendant argues that once it presented persuasive evidence of invalidity, “the burden of going forward shift[ed] to ... [Plaintiff] to present contrary evidence and argument.” (*Id.* at 15) (quoting *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1376–77 (Fed. Cir. 2009)). However, Defendant contends that Dr. Madisetti merely testified that no single reference disclosed all claim elements and that the asserted references were before the PTO during examination. (*Id.*).

Plaintiffs respond that Mr. Lanning merely provided conclusory testimony regarding the obviousness of claims 1 and 10, as well as the motivation to combine the Sutivong and Tan references. (Dkt. No. 588 at 19). Plaintiffs argue this such general and conclusory testimony is insufficient under the relevant case law, particularly in the face of contrary testimony from Dr. Madisetti. (*Id.* at 19–20).

It was Defendant’s burden to show, by clear and convincing evidence, that claims 1 and 10 were invalid. Defendant must now show that “the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless*, 880 F.3d at 1361. The Court does not find that the evidence does any such thing. With respect to Defendant’s obviousness arguments, although Mr. Lanning testified that claims 1 and 10 of the ’557 Patent were obvious in view of Sutivong and Tan, the jury was entitled to disregard such evidence.

## ii. The ’332 Patent

### 1. Direct Infringement

Claims 6 and 7 of the ’332 Patent require “using a specific equation to calculate the starting point for searching an LTE control channel called the PDCCH: namely, a ‘modulo ‘C’ operation, wherein ‘C’ is determined as ‘floor(N/L).’” (Dkt. No. 554 at 16). Defendant argues that its products do not use the “floor(N/L)” operation, and instead use a fundamentally different *shift* calculation. (*Id.*). Defendant contends that Dr. Madisetti conceded that the Accused Products use a shift calculation but did not explain how the shift calculation literally infringes the claimed the “floor(N/L)” operation. (*Id.*).<sup>4</sup> Instead, Defendant argues, Dr. Madisetti “merely asserted that the claimed equation is ‘implemented,’” which is insufficient. (*Id.*). Defendant contends that its own

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<sup>4</sup> Plaintiffs did not advance an infringement theory under the doctrine of equivalents for the ’332 Patent. (Dkt. No. 554 at 16) (citing Dkt. No. 493 at 440:19–25).

witnesses detailed how the shift calculations performed by the Accused Products are different from and are more efficient than the claimed “floor(N/L)” operation. (*Id.* at 17). For example, Mr. Lanning used source code to describe how the Accused Products use a shift calculation instead of a “floor(N/L)” operation and, consequently, “perform 36 million fewer processing steps every hour.” (*Id.* at 17).

Plaintiffs respond that Dr. Madisetti provided independent theories for this limitation: (1) that the LTE standard recites the claimed “floor(N/L)” function, and the Accused Products practice the relevant portions of the standard; and (2) that the “floor(N/L)” was literally met by “the value of N right shifted by 1” in the source code for the Accused Products. (Dkt. No. 588 at 20). Plaintiffs assert that Dr. Madisetti testified that a shift is the same as a divide function such as the claimed “floor(N/L)” operation. (*Id.*) (citing Dkt. No. 493 at 445:17–446:6, 442:25 – 443:2, 447:21–448:6, 449:8–9, 474:14–24). Similarly, Plaintiffs argue that Defendant’s expert, Mr. Lanning, admitted that a shift operation is really a divide operation. (Dkt. No. 588 at 21) (citing Dkt. No. 506 at 50:24–21:2).

The Court is persuaded that Plaintiffs introduced sufficient evidence regarding this limitation. Considering the infringement theory based on source code alone, Dr. Madisetti provided sufficient evidence that the shift function performed by the Accused Products literally infringes the claimed “floor(N/L)” operation. (*See* Dkt. No. 493 at 445:17–446:6, 442:25–443:2, 447:21–448:6, 449:8–9, 474:14–24).

## 2. Validity

Defendant argues that claims 6 and 7 of the ’332 Patent are invalid as obvious in view of the Ericsson and Knuth references, and no reasonable jury could conclude otherwise. (Dkt. No. 554 at 18–20). Defendant states that Mr. Lanning testified that the Ericsson reference discloses

each limitation of claims 6 and 7, except for the specific claimed equation. (*Id.* at 19). Mr. Lanning then testified that Knuth disclosed that specific equation and testified regarding the motivation to combine the two references with a reasonable expectation of success. (*Id.*). Plaintiffs rebuttal, Defendant argues, did nothing to substantively undermine Mr. Lanning’s obviousness analysis. (*Id.* at 20).

Plaintiffs respond that Mr. Lanning merely provided conclusory testimony regarding the obviousness of claims 6 and 7, as well as the motivation to combine or modify the Ericsson and Knuth references. (Dkt. No. 588 at 22–23). Plaintiffs argue this such general and conclusory testimony is insufficient under the relevant case law, particularly in the face of contrary testimony from Dr. Madisetti. (*Id.* at 22–23).

Defendant bore the burden to show by clear and convincing evidence that claims 6 and 7 were invalid. However, Defendant has not shown that reasonable jurors could not arrive at a conclusion contrary to that of its expert, Mr. Lanning. The jury was entitled to disregard Mr. Lanning’s testimony that claims 6 and 7 of the ’332 Patent were obvious in view of Ericsson and Knuth.

### **iii. The ’774 Patent**

#### **1. Direct Infringement**

##### *i. “receiving a processing parameter” limitation*

Defendant argues that no reasonable jury could have found the Accused Products infringe claim 6 of the ’774 Patent, which requires “receiving” a “processing parameter” that includes “at least one of a time delay, a phase rotation and a gain.” (Dkt. No. 554 at 21) (citing PX-0005). Defendant contends that its own expert, Dr. Wells, explained how “the accused products construct a processing parameter on their own, and do not receive one.” (*Id.* at 23). Defendant argues that

Dr. Mahon’s identification of a “codebook index” as the “processing parameter” fails because the Accused Products derive the codebook index, rather than receive it, and the codebook index is not a “processing parameter.” (*Id.*).

Plaintiffs argue that claim 6 simply requires that the accused device “receiv[e] a processing parameter,” and that the processing parameter “includ[e]” one of a time delay, a phase rotation, or a gain. (Dkt. No. 588 at 24) (citing ’774 Patent, Cl. 6). Plaintiffs contend that this limitation does not prescribe “how the gain or phase rotation information included in the processing parameter is extracted from the received processing parameter.” (Dkt. No. 588 at 24). Accordingly, Plaintiffs argue that Dr. Mahon testified that the Accused Products receive “precoding information” which carries the processing parameter. (Dkt. No. 588 at 24) (citing Dkt. No. 501 at 60:10–16). Dr. Mahon then explained that certain tables in the LTE standard are used to determine the required phase rotation and gain information. (Dkt. No. 588 at 24) (citing Dkt. 501 at 60:17–61:16; PX2142 at 0050).

Plaintiffs provided sufficient evidence from which the jury could reasonably conclude the Accused Products satisfied this limitation. In particular, Dr. Madisetti testified that “processing information” is “receiv[ed]” through the precoding information, which contains “at least one of a time delay, a phase rotation and a gain.” (Dkt. No. 588 at 24) (citing Dkt. No. 501 at 60:10–61:16, 61:21–62:11; PX2142).

*ii. “demodulating” limitation*

For the limitation in claim 6 reciting “demodulating the first data symbol and the second data symbol based on the processing parameter, the first pilot and the second pilot,” Defendant argues that Plaintiffs offered nothing more than conclusory testimony from Dr. Mahon that this

element was satisfied. (Dkt. No. 554 at 24–25). Such conclusory testimony, Defendant argues, cannot suffice to show infringement by the Accused Products. (*Id.*).

In response, Plaintiffs argue that Dr. Mahon analyzed the relevant source code and testified that based on his analysis, the “demodulating” claim limitation was satisfied. (Dkt. No. 588 at 27) (citing Dkt. 501 at 65:11-66:6; PX0113, PX0120, PX0096, PX0094). Plaintiffs also argue that Apple did not contest infringement of this limitation at any point during trial. (Dkt. No. 588 at 27–28).

The Court is satisfied that Plaintiffs provided sufficient evidence from which the jury could reasonably conclude the Accused Products satisfied this limitation. The jury was entitled to rely on Dr. Mahon’s analysis of the source code, especially since Defendant presented no evidence to the contrary regarding the “demodulating” limitation.

### *iii. Use of Method Claim 6 in the United States*

Defendant argues that Plaintiffs offered no evidence of actual infringing use of claim 6 in the United States, and judgment as a matter of law is required. (Dkt. No. 554 at 25).

Plaintiffs responds that they presented evidence through Dr. Mahon that Defendant infringed claim 6 in the United States by showing testing through test logs. (Dkt. No. 588 at 28) (citing Dkt. No. 501 at 77:9–79:16; PX2362, PX1996).

The Court is satisfied that Plaintiffs provided sufficient evidence from which the jury could reasonably conclude the Accused Products performed claim 6 in the U.S. The jury was entitled to rely on Dr. Mahon’s analysis of test logs to show testing in the United States.

### *iv. Doctrine of Equivalents*

Defendant argues that Plaintiffs’ doctrine-of-equivalents theory should fail because it “consisted only of cursory testimony parroting the function/way/result test and the same evidence

already offered for literal infringement.” (Dkt. No. 554 at 25). As to the “function” prong of the DOE test, Defendant argues that Dr. Mahon failed to explain how the functions of “carrying the processing parameter information to the phone” and “customization of the signals that are coming to [the] phone” are substantially the same as the claimed function of “receiving a processing parameter.” (*Id.* at 25–26). As to the “way” prong of the DOE test, Defendant contends Dr. Mahon failed to explain how carrying processing parameter information on a DCI format 2 message is substantially the same as “receiv[ing] bits of information that are a processing parameter,” as recited in claim 6. (*Id.* at 26–27). Finally, Defendant argues that Dr. Mahon failed to describe how the result of accessing gain and phase rotation information from the codebook index is substantially the same as “receiving a processing a parameter.” (*Id.* at 27–28).

Plaintiffs respond that Dr. Mahon explained that to the extent the Accused Products do not literally infringe this limitation, the function of selecting a “receiving a processing parameter” is satisfied by the DCI format 2 message which carries the codebook index. (Dkt. No. 588 at 29) (citing Dkt. No. 501 at 132:13–133:1). Plaintiffs contend that Dr. Mahon testified extensively that literal infringement occurs by receiving a DCI message and using a codebook index to derive gain and phase rotation information. (Dkt. No. 588 at 29–30) (citing Dkt. 501 at 66:11–18, Dkt. 507 92:20–93:5, 96:1–12). Plaintiffs argue that for the DOE analysis, it was appropriate for Dr. Mahon to build upon without repeating his prior testimony relating to literal infringement. (Dkt. No. 588 at 28–30).

The Court finds that Dr. Mahon properly incorporated by reference his earlier testimony into the DOE analysis. (Dkt. No. 501 at 132:13–133:1). Dr. Mahon further expanded upon that analysis to show insubstantiality between the claims and the Accused Products. (Dkt. 507 at 92:20–



93:5, 96:23–97:12, 96:1–12). The Court finds that Plaintiffs presented substantial evidence to support a finding of infringement under the DOE as to this limitation.

## 2. Validity

Defendant argues that its expert, Dr. Wells, explained how claim 6 of the '774 Patent was invalid as obvious in view of the Murakami and Hottinen references. (Dkt. No. 554 at 28). Defendant further argues that Dr. Wells explained how Plaintiffs' expert, Dr. Mahon, used an overbroad application of the "receiving a processing parameter" limitation to show infringement. (*Id.*). Under that infringement theory, Dr. Wells testified, the Murakami and Hottinen references rendered Claim 6 invalid. (*Id.*). Defendant asserts that no reasonable jury could disagree with Dr. Wells' conclusion regarding the validity of claim 6. (*Id.*).

Plaintiffs respond that Defendant's expert, Dr. Wells, failed to present any disclosure in the prior art of "processing parameter" being "based on a received uplink signal." (Dkt. No. 588 at 31). Additionally, Plaintiffs contend that Dr. Wells failed to present any motivation to combine or modify the Murakami and Hottinen references. (*Id.*). Plaintiffs argue that this such general and conclusory testimony is insufficient under the relevant case law, particularly in the face of contrary testimony from Dr. Mahon. (Dkt. No. 588 at 30–31).

To overcome the jury's finding of no invalidity, Defendant must now show "the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion." *Core Wireless*, 880 F.3d at 1361. The Court finds that Defendant has failed to meet this burden, as the jury was entitled to disregard Dr. Wells' testimony in favor of Dr. Mahon's.

#### iv. The '833 Patent

##### 1. Direct Infringement

Defendant argues that JMOL of no infringement is warranted for claim 8 of the '833 Patent because control and data signals in the Accused Products are not mapped on a “row-by-row” basis, as claimed. (Dkt. No. 554 at 28). First, Defendant argues that Dr. Madisetti provided conclusory testimony that the LTE standard requires the claimed mapping, but he did not show that the Accused Products practice that portion of the standard. (*Id.* at 28–29). Second, Defendant contends that Dr. Madisetti identified source code in the Intel and Qualcomm processors which discloses the claimed mapping, but he did not specify whether the information bits are mapped on a row-by-row or column-by-column basis. (*Id.* at 29–31). By contrast, Defendant states that two of its witnesses—Dr. Josiam and Dr. Wells—testified that both the Intel and Qualcomm processors in the Accused Products map control and data signals on a “column-by-column” basis. (*Id.* at 31–32).

Plaintiffs respond that Dr. Madisetti provide specific testimony that the LTE standard discloses row-by-row mapping of control and data signals. (Dkt. No. 588 at 31–32) (citing Dkt. No. 501 at 188:3–20). Plaintiffs assert that Dr. Madisetti testified that this portion of the LTE standard is mandatory, and “Apple’s products satisfy this claim limitation based on the standard.” (Dkt. No. 588 at 32) (citing Dkt. No. 501 at 188:23–189:4; Dkt. No. 502 at 32:1–12; PX2142). Plaintiffs argue that Dr. Madisetti also described how the Intel and Qualcomm source code confirms that the Accused Products map signals row-by-row. (Dkt. No. 588 at 32) (citing Dkt. No. 501 at 189:17–190:3, 191:9–12).

The Court finds substantial evidence that the Accused Products map signals on a “row-by-row” basis. Dr. Madisetti testified to the same, demonstrating infringement under both the mapping

to the LTE standard and his independent analysis of Intel and Qualcomm source code. (Dkt. No. 501 at 188:3–190:3, 191:9–12; Dkt. No. 502 at 32:1–12; Dkt. No. 507 at 66:17–69:23; PX2142 at 31–32).

## **2. Validity**

Defendant argues that its expert, Dr. Wells, explained how claim 8 of the '833 Patent was invalid as obvious in view of the Maladi, Qualcomm, and Samsung references. (Dkt. No. 554 at 32). Defendant asserts that no reasonable jury could disagree with Dr. Wells' conclusion that claim 8 was invalid. (*Id.*).

In response, Plaintiffs argue that Defendant did not present an element-by-element analysis or show any motivation to combine the Maladi, Qualcomm, and Samsung references. (Dkt. No. 588 at 35). Plaintiffs contend that Dr. Madisetti, on the other hand, explained why Dr. Wells' invalidity opinions were insufficient—namely because collectively, the asserted references did not contain each claim limitation of claim 8. (Dkt. No. 588 at 35–36) (citing Dkt. No. 507 at 74:5–25).

The Court finds that substantial evidence supports the jury's conclusion that Defendant failed to meet its heavy burden to show invalidity of Claim 8 by clear and convincing evidence. The jury was entitled to reject Dr. Wells' testimony regarding invalidity.

### **b. THE SECOND JMOL MOTION**

Apple argues that it is entitled to judgment as a matter of law on the basis that Plaintiffs did not present sufficient evidence to support a finding of liability for (1) infringement of the '284 Patent, and (2) indirect and willful infringement of all patents. (Dkt. No. 554 at 5). For the '284 Patent, Apple challenges the sufficiency of the evidence with respect to direct infringement and validity. (*See id.* at 1–7). For all Asserted Patents, Defendant challenges the sufficiency of the evidence with respect to induced, contributory, and willful infringement. (*Id.* at 7–20).

## i. The '284 Patent

### 1. Direct Infringement

Claims 1, 14, and 27 of the '284 Patent require a control information field (1) “wherein a first subset of the values is reserved for indicating the transport format,” (2) “a second subset of the values ... is reserved for indicating the redundancy version,” and (3) “the first subset of the values contains more values than the second subset of the values.” (*Id.* at 6) (citing PX0003). Defendant argues that in the accused MCS Index from the LTE standard, fewer values are reserved for indicating the transport format (the first subset) than are reserved for indicating the redundancy version (the second subset). (*Id.* at 6). Defendant contends that under the LTE standard, “every MCS Index value (0-31) (32 values) is reserved for indicating a redundancy version, but fewer values (0-28) (29 values) are reserved for the transport format.” (*Id.* at 7). This configuration, Defendant argues, is the exact opposite what is claimed. (*Id.* at 6).

Plaintiffs respond that Dr. Mahon testified as to how Table 8.6.1-1 of the LTE standard satisfies this claim limitation. (Dkt. No. 589 at 6–7) (citing Dkt. No. 501 at 30:2–17). Plaintiffs contend that Dr. Mahon also explained how the Intel and Qualcomm source code references Table 8.6.1-1 to derive the TBS and RV values. (Dkt. No. 589 at 7) (citing Dkt. No. 501 at 31:21–32:2, 32:21–33:7). Plaintiffs explain that Defendant’s corporate witness, Dr. Josiam, testified that in the LTE standard, the first 28 rows (the first subset identified by Dr. Mahon) had TBS index values, and that in the last three rows (the second subset identified by Dr. Mahon) the TBS index value “is not present” but has changing RV values. (Dkt. No. 589 at 8). From this testimony, Plaintiffs argue that the jury could reasonably conclude the limitation was satisfied. Plaintiffs also point out that in its Claim Construction Order, the Court ruled that “whether a particular value, such as an index,

satisfied the ‘reserved for indicating’ limitation is an issue of fact for the jury.’” (Dkt. No. 589 at 6) (quoting Dkt. No. 130 at 33).

The Court finds that the jury was entitled to rely on Plaintiffs’ evidence and reject Defendant’s. Through Dr. Mahon, Plaintiffs provided substantial evidence to support a finding that “the first subset of the values contains more values than the second subset of the values.” (*See, e.g.*, Dkt. No. 501 at 30:2–17, 31:21–32:2, 32:21–33:7).

## 2. Validity

Defendant argues that the claims must be interpreted the same way for infringement and invalidity, and states that it proved at trial that “any application of the claims that covered Apple’s accused products would also have been rendered obvious by the prior art.” (Dkt. No. 555 at 10). Defendant contends that Plaintiffs applied a “jointly encoded” approach for infringement, where a common field is used to indicate both the transport format and the redundancy version. (*Id.* at 10–11). This infringement theory, Defendant argues, was shown to be “nothing more than an obvious variation of the prior art’s ‘shared field’ technique, used to indicate the same two parameters.” (*Id.* at 10). Defendant contends that its expert, Dr. Beuhrer described that the Samsung reference disclosed “joint encoding,” and argues that Plaintiffs’ expert, Dr. Mahon, did not meaningfully rebut Dr. Beuhrer’s testimony. (*Id.* at 11–12).

In response, Plaintiffs argue that Defendant offered only a conclusory element-by-element analysis and did not show any motivation to combine or modify the Samsung reference. (Dkt. No. 589 at 13). Plaintiffs contend that Dr. Mahon, on the other hand, explained why Dr. Buehrer’s invalidity opinions were insufficient—namely due to the lack of motivation to combine and difficulty in making the proposed alteration. (Dkt. No. 589 at 14) (citing Dkt. No. 507 at 105:14–106:13).

Defendant has not shown that “the evidence points so overwhelmingly in favor of one party that reasonable jurors could not arrive at any contrary conclusion.” *Core Wireless*, 880 F.3d at 1361. The jury was entitled to disregard Dr. Beuhrer’s testimony that claims 1, 14, and 27 of the ’284 Patent were obvious in view of the Samsung reference.

## **ii. The Asserted Patents**

### **1. Induced Infringement**

Defendant offers three bases in support of its argument for no induced infringement. First, Defendant argues that “Plaintiffs offered no evidence that any third party directly infringed any asserted claim.” (Dkt. No. 555 at 12). Second, Defendant argues that “Plaintiffs offered no evidence that Apple had ‘knowledge of the patent in suit and knowledge of patent infringement.’” (*Id.*) (citing *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015)). Third, Defendant argues that “the record is devoid of evidence to show that Apple specifically intended to cause infringement.” (*Id.* at 16).

Defendant argues that Plaintiffs offered no evidence of third-party direct infringement or of actual infringing use in the U.S. for the asserted method claims. (Dkt. No. 555 at 12). As to the knowledge element, Defendant argues that the Plaintiffs alleged knowledge (or willful blindness) of the Asserted Patents based on a January 6, 2017 letter from Thomas Miller of Optis to Bruce Sewell of Apple to initiate licensing discussions of the Optis patent portfolio. (*Id.* at 13) (citing PX0548a) (the “2017 letter”). The 2017 letter stated that “a large number of [Optis’s] patents and patent applications” had been declared standard essential and should be “of particular interest” to Apple. (PX0548a). Plaintiffs further argued that Apple “didn’t go to an independent expert to have conversations with them regarding the patents” in response to the letter. (*Id.*). Defendant points out that Plaintiffs also argued knowledge of the Asserted Patents based on Defendant’s access to

a standard industry database called “Innography,” where subscribers can search for patents by owner. (*Id.*). Defendant’s in-house lawyer, Ms. Heather Mewes, testified that Defendant “access[ed] this [Innography] database in 2018 to identify what portion of ... declared essential patents are owned by PanOptis.” (*Id.* at 13) (citing Dkt. No. 437 at 34:8–19). Defendant argues that Optis’s portfolio contained many patents, only five of which are the Asserted Patents, and Plaintiffs offered no evidence that Defendant learned of the specific Asserted Patents through the Innography database. (*Id.* at 13–16). Defendant contends that this evidence, coupled with Defendant’s strong belief in noninfringement, is insufficient to support a finding of inducement. (*Id.*).

Plaintiffs respond that they provided sufficient evidence that Defendant’s customers directly infringe the Asserted Claims by using Accused Products connected to the LTE network. (Dkt. No. 589 at 15). For the ’774 Patent, Plaintiffs assert that they provided evidence of test reports that showed the use of TM4 and DCI format 2 by Apple customers in the United States. (Dkt. No. 589 at 15) (Dkt. No. 501 at 60:10–16). For the ’557 Patent, Plaintiffs point to evidence of transaction log data on RACH preambles being sent by mobile devices on LTE networks. (Dkt. No. 589 at 15) (citing Dkt. No. 502 at 29:3–25, 32:4–17; PX2855). For the ’284 Patent, Plaintiffs argue that they introduced evidence that “Apple’s devices cannot actually function or send any data to the base station without infringing Claim 14.” (Dkt. No. 589 at 15) (citing Dkt.No. 501 at 13:1–7).

As to knowledge of the Asserted Patents, Plaintiffs argue that post-suit knowledge is legally sufficient for indirect infringement, especially since Plaintiffs only sought damages for infringing acts after the filing of the Complaint. (Dkt. No. 589 at 16) (citing *Cellular Commc’ns Equip. LLC v. HTC Corp.*, 323 F. Supp. 3d 870, 873-74 (E.D. Tex. 2018); *In re Bill of Lading*

*Transmission & Processing Sys. Patent Litig.*, 681 F.3d 1323, 1345 (Fed. Cir. 2012)). In addition, Plaintiffs argue that the record supports a finding of willful blindness. (Dkt. No. 589 at 17). Plaintiffs argue that Defendant had a list of Plaintiffs’ declared-essential patents since receiving the 2017 Letter from Plaintiffs, which included the “specifications or parts of the standard in which the patents’ claims are essential to those specific specifications in the standard.” (*Id.* at 17) (citing Dkt. No. 491 at 279:11–17). Since Defendant had access to the Innography database, which contains “all of the declarations made by any party for standard essential patents,” Plaintiffs argue that the evidence showed Defendant could have discovered the Asserted Patents but remained willfully blind to the same. (Dkt. No. 589 at 17) (citing Dkt. No. 495 at 643:9–644:10; Dkt. No. 503 at 12:12–13:9; Dkt. No. 504 at 69:3–7). Finally, Plaintiffs argue that Defendant’s allegedly reasonable noninfringement arguments are insufficient to avoid liability because the jury could still find “knowledge of the underlying direct infringement ... under the doctrine of willful blindness. (Dkt. No. 589 at 17–18) (quoting *Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1363 (Fed. Cir. 2016)).

As to specific intent to induce infringement, Plaintiffs argue by advertising the benefits of LTE such as speed, Defendant promoted the use of LTE, thereby promoting the use of the LTE standard-essential patents. (Dkt. No. 589 at 18) (citing PX0190, PX0337, PX0192). Similarly, Plaintiffs contend that because the Asserted Patents are standard-essential patents, Defendant’s advertisement of the Apple devices’ interoperability with the LTE standard means Defendant intended for its customers to use the patented LTE features. (Dkt. No. 589 at 19).

The Court finds substantial evidence that Defendant induced its customers to infringe the Asserted Patents. Post-suit notice of the Asserted Patents is sufficient to satisfy the knowledge required for induced infringement, as Plaintiffs are not seeking damages before the date of the



Complaint. *See Cellular Commc'ns Equip. LLC v. HTC Corp.*, 323 F. Supp. 3d 870, 873–74 (E.D. Tex. 2018); *In re Bill of Lading Transmission & Processing Sys. Patent Litig.*, 681 F.3d 1323, 1345 (Fed. Cir. 2012). Though Defendant believes its noninfringement defenses were reasonable, the jury was entitled to reject (and did reject) the same.

## 2. Contributory Infringement

Defendant asserts that Plaintiffs admitted their claim of contributory infringement lacked any supporting evidence and should not go to the jury. (Dkt. No. 555 at 17) (citing Dkt. No. 499 at 926:14–927:7). Plaintiffs do not dispute this argument in their response or sur-reply. (*See generally* Dkt. Nos. 589, 618). The Court notes that it did not instruct the jury as to contributory infringement, so, in effect, the claim was not before the jury. (Dkt. No. 499 at 40:19–79:11; Dkt. No. 483). However, given that there is no evidence in the record with respect to Plaintiffs' claim of contributory infringement, Defendant's motion for judgment as a matter of law should be and hereby is **GRANTED**.

## 3. Willful Infringement

Defendant argues that Plaintiffs failed to prove that it had knowledge of the Asserted Patents and thereafter “‘acted egregiously, willfully or wantonly’ or with deliberate indifference to a high or excessive danger of infringement of the asserted patents.” (Dkt. No. 555 at 17). As to the knowledge requirement, and as described *supra*, Plaintiffs argued pre-suit notice of the Asserted Patents based on the 2017 Letter and Defendant's access to the Innography database. (*Id.* at 18). Defendant argues that (1) the 2017 Letter did not constitute notice because it referred to Optis's large portfolio, and (2) “access to a patent database does not confer knowledge of any specific patent.” (*Id.*).

Defendant also argues that Plaintiffs presented no evidence that Defendant engaged in any “misconduct beyond typical infringement”—a course of conduct held insufficient to support willfulness under *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923, 1935 (2016). (*Id.* at 19). Defendant contends that Plaintiffs did not advance a copying theory, and Defendant independently designed and sold the Accused Products years before being contacted by Plaintiffs. (*Id.*). In addition, Defendant argues the record is devoid of evidence reflecting a subjective belief of infringement, and instead suggests a strong belief of noninfringement. (*Id.* at 21).

Defendant also presents a separate basis for JMOL as to willfulness. Defendant argues that due to the exclusion of FRAND evidence from the trial, any evidence regarding “holdout” strategy should have been excluded. (*Id.* at 22). However, Defendant argues that PX1537—a document discussing Defendant’s FRAND licensing strategy—was improperly admitted because the exhibit pre-dates the earliest alleged notice date and because FRAND evidence was excluded from the jury trial. (*Id.*). Given the prohibition of any mention of FRAND, Defendant claims it was prevented from explaining the context of PX1537, and any jury determination of willfulness stemming therefrom is improper. (*Id.*). Defendant argues that it was a willing licensee and negotiated in good faith with Plaintiffs, and thus any infringement could not have been willful. (*Id.* at 24).

Plaintiffs respond with two arguments: (1) pre-suit knowledge is not required to establish willful infringement; and (2) the evidence discussed *supra* with respect to induced infringement shows Defendant had pre-suit knowledge of the Asserted Patents and its own infringement. (Dkt. No. 489 at 19–20) (citing *Packet Intelligence LLC v. NetScout Sys., Inc.*, 2019 WL 2375218, at \*8 (E.D. Tex. June 5, 2019); *Huawei Techs. Co. v. T-Mobile U.S., Inc.*, 2017 WL 1129951, at \*4 (E.D. Tex. Feb. 21, 2017)). Plaintiffs further argue that a willful state of mind can be inferred from

Defendant's implementation and continued use of the LTE standard—despite knowing of the declared-essential patents—as well as Defendant's failure to conduct a meaningful pre-suit investigation. (Dkt. No. 589 at 21–22).

The Court finds substantial evidence to support the jury's finding of willful infringement. Pre-suit knowledge is not required for willfulness, and here Defendant is not seeking damages for pre-suit infringement. The jury was entitled to reject Defendant's noninfringement defenses and find that Defendant “‘acted egregiously, willfully or wantonly’ or with deliberate indifference to a high or excessive danger of infringement of the asserted patents.” *Halo*, 136 S. Ct. at 1935. In addition, the issue of willfulness is effectively moot because even though the jury found that Defendant's infringement was willful, the Court acting separately has previously declined to enhance damages under 35 U.S.C. § 284, negating any tangible impact to Defendant from the jury's willfulness finding. (Dkt. No. 544).

### **c. THE DAMAGES JMOL MOTION**

Defendant seeks judgment as a matter of law of no damages. (*See generally* Dkt. No. 557). Plaintiffs responds that the evidence supported the jury's damages verdict. (*See generally* Dkt. No. 590).

As previously noted, the Court granted a motion for new trial on the issue of damages. Accordingly, this motion seeks relief which has already been granted, and the Damages JMOL Motion (Dkt. No. 557) is **DENIED AS MOOT**.

### **III. DEFENDANT'S MOTION FOR NEW TRIAL**

Pursuant to Federal Rule of Civil Procedure 59, Defendant moved for a new trial. (*See* Dkt. No. 578). The Court finds that none of the grounds asserted by Defendant compel setting aside the jury's verdict and granting a new trial.

### A. Legal Standard

Rule 59 provides that a new trial may be granted on all or part of the issues on which there has been a trial by jury for “any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). Notwithstanding the broad sweep of Rule 59, “courts do not grant new trials unless it is reasonably clear that prejudicial error has crept into the record or that substantial justice has not been done, and the burden of showing harmful error rests on the party seeking the new trial.” *Metaswitch Networks Ltd. v. Genband US LLC*, No. 2:14-CV-00744, 2017 WL 3704760, at \*2 (E.D. Tex. Aug. 28, 2017); *Erfindergemeinschaft UroPep GbR v. Eli Lilly & Co.*, 276 F. Supp. 3d 629, 643 (E.D. Tex. 2017). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612–13 (5th Cir. 1985); *see also Laxton v. Gap Inc.*, 333 F.3d 572, 586 (5th Cir. 2003) (“A new trial is warranted if the evidence is against the great, and not merely the greater, weight of the evidence.”). Furthermore “[u]nless justice requires otherwise, no error in admitting or excluding evidence—or any other error by the court or a party—is ground for granting a new trial . . . the court must disregard all errors and defects that do not affect any party’s substantial rights.” Fed. R. Civ. P. 61.

### B. Discussion

Defendant seeks a new trial on non-infringement and invalidity of the Asserted Patents, willfulness, and damages. (*See generally* Dkt. No. 578). Defendant also argues that errors in the verdict form warrant a new trial and that damages should be remitted. (*Id.*).

**a. Willfulness**

Defendant argues that a new trial is warranted because the trial was structured to allow Plaintiffs to unfairly paint Defendant as a “holdout” during negotiations over Optis’s SEPs, without giving Defendant a chance to properly rebut this narrative. (*Id.* at 7–9). Specifically, Defendant asserts that PX1537—a document discussing Apple’s FRAND licensing strategy—was improperly admitted because the exhibit pre-dates the earliest alleged notice date and because FRAND evidence was excluded from the jury trial. (*Id.*). Given the prohibition on any mention of FRAND, Defendant claims it was prevented from explaining the context for the contents of PX1537. (*Id.*). Defendant further argues that Dr. Josiam and Mr. Ramaprasad—engineers who designed the Intel chips in the Accused Products—were improperly precluded from testifying to rebut willfulness, on the ground that their testimony improperly encroached on the realm of expert testimony. (*Id.* at 9–10).

Plaintiffs argue that PX1537 is relevant to willfulness and is not a FRAND document. (Dkt. No. 591 at 6). According to Plaintiffs, the FRAND redactions on the document are minimal because the document relates to standard-essential patent licensing, and as such, Plaintiffs’ damages expert Mr. Kennedy discussed PX1537 in the context of the *Georgia-Pacific* factors. (Dkt. No. 591 at 7–8). Plaintiffs also assert that Defendant had the opportunity to effectively cross-examine Mr. Kennedy and rebut Plaintiffs’ willfulness case. (*Id.* at 8–9). As to the testimony of Intel engineers Dr. Josiam and Mr. Ramaprasad, Plaintiffs argue that preclusion was proper because fact witnesses cannot properly compare the Accused Products to the LTE standard. (*Id.* at 9–10).

First, the Court notes that the word “FRAND” was redacted from PX1537 and the word “FRAND” was not mentioned to the jury. Second, “no error in admitting . . . evidence . . . is ground

for granting a new trial,” unless justice mandates a new trial. Fed. R. Civ. P. 61 (emphasis added). This rule applies to the exclusion of certain of Dr. Josiam’s and Mr. Ramaprasad’s testimony. Third, the Court previously granted a new trial on damages where FRAND evidence will be presented. (Dkt. No. 585). In the Order granting the motion for new trial, the Court separately explained that although “the jury found that Apple’s infringement was willful, the Court declined to enhance damages under 35 U.S.C. § 284, negating any tangible impact to Apple from the jury’s willfulness finding.” (Dkt. No. 585 at 10). Accordingly, the admission of a redacted version of PX1537 does not compel a new trial.

#### **b. Admission of Expert Evidence**

Defendant also argues that the testimony of several of Plaintiffs’ experts should have been excluded. First, Defendant asserts that Plaintiffs improperly relied on opinions from non-testifying experts. (Dkt. No. 578 at 10). Specifically, Defendant argues that Dr. Mahon and Dr. Madisetti were permitted to channel the opinions of non-testifying source code expert Mr. Jones, testing expert Mr. Royer, and simulation expert Dr. Viridis. (*Id.*). According to Defendant, the admission of this evidence—combined with the Court’s limitations on impeachment—barred Defendant from exposing key conflicts between the testifying and non-testifying experts’ opinions. (*Id.* at 10–11).

Second, Defendant argues that Plaintiffs were improperly allowed to compare Defendant’s products to disclosed embodiments in the Asserted Patents, rather than the Asserted Claims. (*Id.*). Despite an order *in limine* excluding “testimony about accused product[s] practicing the embodiments of the patent-in-suit,” Defendant argues that for the ’557 and ’284 Patents, Plaintiffs were allowed to elicit testimony from multiple experts improperly comparing the specification to the Accused Products. (*Id.* at 11–12).

Third, Defendant argues the Court improperly excluded expert testimony regarding the '284 Patent's file history, "even though it was an admitted exhibit central to Plaintiffs' expert's theory." (*Id.* at 13). Defendant contends that Plaintiffs used the file history of the '284 Patent (PX0009) to support their expert's opinion that the claims were satisfied because a "first subset of the values [reserved for indicating the transport format]" contains "more values than the second subset of the values [reserved for indicating the redundancy version]." (*Id.* at 12). According to Defendant, Plaintiffs then attacked Defendant's expert Dr. Buehrer for excluding embodiments from the claims. (*Id.* at 12–13). The Court sustained objections to Defendant's attempt to introduce the file history, rejecting the argument that Plaintiffs had opened the door. (*Id.* at 13). Defendant argues this exclusion warrants a new trial. (*Id.* at 12–14).

Plaintiffs respond that the Court was justified in limiting impeachment of the testifying experts who relied on non-testifying experts. (Dkt. No. 591 at 11–12). For example, Plaintiffs contend that Mr. Jones' deposition testimony was properly excluded because his testimony was not disclosed in pretrial disclosures and he was not listed on Defendant's witness list. (*Id.* at 11). As to the other non-testifying experts, Plaintiffs argue that the testifying experts, Dr. Madisetti and Dr. Mahon, conducted their own source code review and reached their own independent conclusions. (*Id.* at 12) (citing Dkt. No. 493 at 468:25–469:4; Dkt. No. 501 at 10:3–11:3).

Plaintiffs also argue that they did not compare disclosed embodiments in the Asserted Patents to the Accused Products, but rather used disclosed embodiments from the specification to show correlation to the LTE standard, as well as to educate the jury as to the relevant technology. (Dkt. No. 591 at 13–14). As to the file history for the '284 Patent, Plaintiffs assert that the Court properly excluded the same because Defendant sought to explain how claim amendments over

time impacted the claims' meaning—an issue for the Court during claim construction, not for the jury. (*Id.* at 14).

The Court finds that Defendant's objection to the admission of expert testimony does not warrant a new trial. Testifying experts are allowed to rely on non-testifying experts as long as they fully explain the bases for their opinions. *See Monsanto Co. v. David*, 516 F.3d 1009, 1015 (Fed. Cir. 2008). Any error in admitting testimony regarding the non-testifying experts does not warrant a new trial. *See* Fed. R. Civ. P. 61. The Court also finds that Plaintiffs made no improper comparison of disclosed embodiments in the Asserted Patents to the Accused Products. Further, the '284 Patent file history was properly excluded because the time for claim construction had come and gone.

#### c. Damages

Defendant argues that a new trial on damages is warranted because (1) the Court denied Defendant's proposed instruction regarding the smallest saleable patent practicing unit (SSPPU); (2) the testimony of Plaintiffs' damages expert, Mr. Kennedy, should have been excluded; (3) Dr. Reed-Arthurs' testimony should have been excluded; and (4) Plaintiffs' references to pre-suit damages were unfairly prejudicial. (Dkt. No. 578 at 14–17). Alternatively, Defendant urges the Court to grant a remittitur. (Dkt. No. 578 at 8–11). As noted *supra*, the Court granted Defendant's motion for new trial on the issue of damages. Accordingly, this motion seeks relief which has already been granted, and Defendant's request for a new trial on damages is **DENIED AS MOOT**.

#### d. Verdict Form

Defendant makes several catch-all arguments in support of a new trial as to liability. First, Defendant argues that JMOL as to any patent requires setting aside the entire verdict. (*Id.* at 17). Second, Defendant contends JMOL of no infringement under DOE for either the '557 or '774



Patent requires setting aside the entire verdict. (*Id.* at 12). Third, Defendant argues a new trial is required because the verdict form violated its right to a unanimous verdict. (*Id.* at 20). Fourth, Defendant argues that if the Court grants a new trial on any issue, the Seventh Amendment requires a new trial on all issues. (*Id.* at 19). Each of Defendant’s arguments boils down to an objection to Question 1 of the verdict form, which did not break down the infringement question by each patent claim and each product, as Defendant requested. (Dkt. No. 468-1 at 4; No. 483 at 4). The verdict form also did not separately break out questions for literal infringement and infringement under the doctrine of equivalents. (Dkt. No. 483 at 4).

Question 1 on the verdict form asked the jury, “[d]id Optis prove by a preponderance of the evidence that Apple infringed **ANY** of the Asserted Claims?” (Dkt. No. at 4). The jury unanimously answered “yes” to that question. (*Id.*). The jury’s answers to the remaining questions on the verdict form were consistent with their answers to this question. Further, as noted *supra*, sufficient evidence was presented to support Plaintiffs’ infringement theories. *See Railroad Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1516 (Fed. Cir. 1984) (“[W]hen a jury returns a general verdict, the law presumes the existence of fact findings implied from the jury’s having reached that verdict.”).

Defendant cites *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 849 (Fed. Cir. 2010), for the proposition that a general verdict must be set aside if it rests on multiple, independent legal theories—one of which is defective. (Dkt. No. 578 at 18). That case, however, distinguished between “defects in *legal* theories and defects in *factual evidence*.” *i4i Ltd. P’ship*, 598 F.3d at 850 (emphasis in original). A general verdict will be upheld “if there was sufficient evidence to support *any* of the plaintiff’s alternative factual theories,” on the assumption that “the jury considered all the evidence and relied upon a factual theory for which the burden of proof was satisfied.” (*Id.* at

849) (emphasis in original). Therefore, all that is required in this case is sufficient factual evidence supporting *either* of the independent theories of direct infringement (as to literal or the DOE) and induced infringement. (*See id.* at 598 F.3d at 850). The jury was properly instructed that it could rely on either theory (Dkt. No. 499 at 50:14–19, 63:20–64:23), and as discussed *supra*, the Court has found sufficient evidence under both theories. Accordingly, the Court finds that there was no error in submitting the verdict form as it did, and Defendant’s request new trial as to liability is without merit.

#### IV. CONCLUSION

For the reasons set for herein, Apple Inc.’s Rule 50(B) Motion #1 for Judgment as a Matter of Law of No Liability Under the ’557, ’332, ’774, and ’833 Patents (the “First JMOL Motion”) (Dkt. No. 554); Defendant’s Rule 50(b) Motion #2 for Judgment as a Matter of Law of No Liability on the ’284 Patent and of No Indirect or Willful Infringement of Any Patent (the “Second JMOL Motion”) (Dkt. No. 555); Defendant’s Rule 50(b) Motion for Judgment as a Matter of Law Regarding Damages (the “Damages JMOL Motion”) (Dkt. No. 557); and Apple Inc.’s Supplemental Motion For A New Trial (the “Motion for New Trial”) (Dkt. No. 578) are each **DENIED**, except with respect to Plaintiffs’ claim of contributory infringement, which is **GRANTED**.

**So ORDERED and SIGNED this 9th day of August, 2021.**

  
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RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE